

**CONS. QUEBEC SMELTING & REFINING LTD.**  
(NO PERSONAL LIABILITY)

AR45

**ANNUAL  
REPORT  
1966**

**CONS.  
QUEBEC SMELTING &  
REFINING LTD.**

(NO PERSONAL LIABILITY)

**FERROX  
IRON  
(NEW YORK)  
LTD.**

**FERROX  
IRON  
LTD.**

(NO PERSONAL LIABILITY)

**FERRO-  
MAGNETICS  
LTD.**

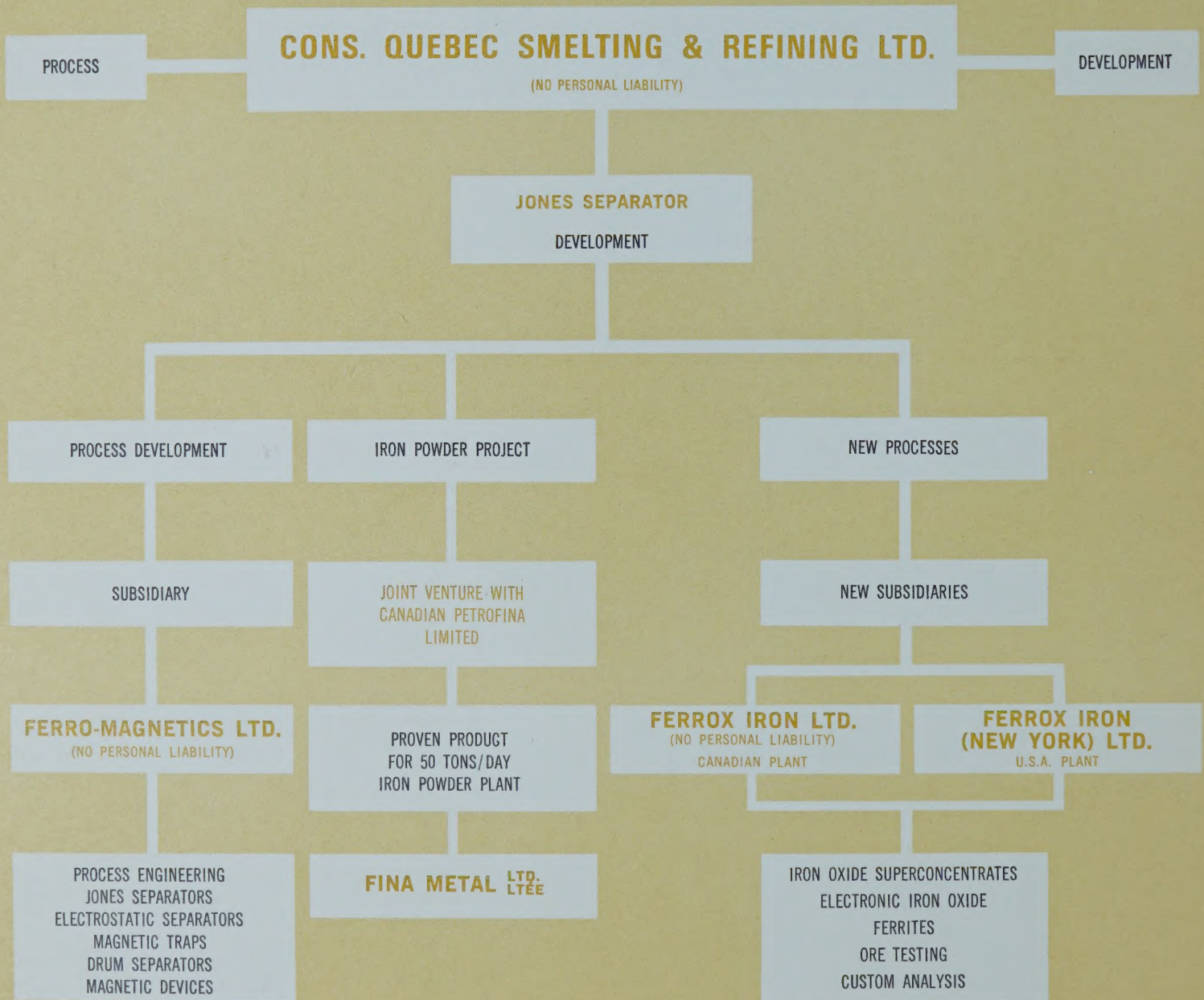
(NO PERSONAL LIABILITY)

**FINA  
METAL**

**LTD.  
LTÉE**



# "GROWTH THROUGH PLANNED DEVELOPMENT"





#### HEAD OFFICE

Suite 400,  
621 Craig Street West,  
Montreal 3, P.Q.

#### TRANSFER AGENTS AND REGISTRARS

Eastern & Chartered Trust Company,  
625 Dorchester Blvd. W.,  
Montreal 2, P.Q.

1901 Yonge St.,  
Toronto 1, Ontario

#### BANKERS

Canadian Imperial Bank of Commerce,  
265 St. James Street West,  
Montreal 1, P.Q.

#### AUDITORS

Price Waterhouse & Co.

#### SHARES LISTED

Canadian Stock Exchange - Montreal, Que.

## CONS. QUEBEC SMELTING & REFINING LTD.

(NO PERSONAL LIABILITY)



Highlights .....	Inside Front Cover
Letter to Shareholders .....	4
Financial Data .....	6
The Year in Review .....	10
Directors, Officers .....	Back Cover





*R. P. Mills*

## TO THE SHAREHOLDERS OF CONS. QUEBEC SMELTING & REFINING LTD.

This has been a year of steady progress. With worldwide acceptance and sale of our barium ferrite products and with manufacturing process and quality controls established, it is now possible to plan for rapid expansion in both plant facilities and further products on a sound basis. Operating profits, though small, were obtained by your subsidiary Ferro-Magnetics Ltd. (\$13,305) from the Jones Wet Magnetic Separator project (\$16,573) and from the sale of ferrites (\$14,845). A large and expanding market is available for the full capacity of both the Prescott plant and the proposed Ogdensburg facilities.

Ferrites are used in television, radio, electronic ignition systems, and ferrite permanent magnets are rapidly replacing copper-wound magnets in DC motors. There is a growing market for such motors in the automobile industry to operate windshield wipers, heater blowers, air conditioners, window lifts and seat adjusters, which is only limited by the amount of ferrites available. The growth potential of your company in this field is great and with the low cost raw material provided by the Jones Wet Magnetic Separator, we should be able to produce ferrites at a lower cost than any other manufacturer in this field.

### **FERROX IRON LTD.**

The plant at Prescott, Ontario, is being expanded and it is hoped to achieve production of Ferrite Powder at the rate of four tons per day by July of this year. Production of such powders began late in 1965, but a number of changes in equipment and processing were necessary in order to obtain continuous output and quality control. The present expansion program is designed to streamline production, eliminate batch handling of material and reduce cost. With the increase in production at the Prescott plant of Ferro Iron Ltd. to four tons per day, an operating profit of approximately \$200,000 per year is projected on this output.

### **FERRO-MAGNETICS LTD.**

This subsidiary during the year completed a large amount of test work, which has opened up a number of new uses for the Jones Wet Magnetic Separator in both metallic and industrial minerals. The first of an improved type of rotary separator has been built by Stearns-Roger Corporation under their manufacturing and sales agreement with your company. The large separator built for Climax is now on stream and operating efficiently.



### **FINA METAL LTD.**

The joint undertaking with Canadian Petrofina Limited is now represented by Fina Metal Ltd., in which your company holds a 49% interest and Canadian Petrofina Limited 51%. A sample plant was built at Prescott, Ontario, with a capacity of 200 pounds of iron powder per day. The plant has been operated continuously, firstly, to prove out the process, and secondly, to supply samples of iron powder for making pressed parts for industry throughout the United States, Europe and Great Britain. Production runs of actual parts have, in some cases, been made and are now undergoing field tests in machines and equipment. A number of evaluations by consumers have indicated that we are able to supply a superior product in this field.

Most of the engineering and design work has been completed for a proposed plant with a capacity of 50 tons of iron powder per day. As soon as sufficient market data is available, a final decision on location of the plant and financing will be made.

### **FERROX IRON (NEW YORK) LTD.**

Your company has now received approval of loans totalling \$810,000 for the construction of a plant in Ogdensburg, New York, with a capacity of from 16 to 20 tons per day of ferrites to supply the U. S. market. The site, including 13 acres of land, together with a well-designed building has been acquired. The raw material, consisting of high-purity iron oxides, will be supplied by Ferrox Iron Ltd. from the plant at Prescott, Ontario, and will therefore not require duplication of these facilities. Market surveys have indicated that the full capacity of this plant can be contracted as soon as definite dates for delivery of products can be set.

### **FINANCIAL**

An issue of \$500,000 of 7% Convertible Debentures was authorized last year and \$150,000 of these Debentures were sold at par. In view of the capital now required for expansion of the Prescott plant of Ferrox Iron Ltd., for the plant of Ferrox Iron (New York) Ltd., and for Fina Metal Ltd., your Directors have authorized an increase in the issue of Debentures from \$500,000 to \$1,000,000. The Debentures are convertible into common stock of the company at \$1.00 per share until February 1, 1969, at \$1.50 per share until February, 1970, at \$2.00 per share in 1971 and at \$2.50 per share until January 31, 1972.

It is proposed to offer \$400,000 of the 7% Convertible Debentures to shareholders at par when the requirements of the authorities having jurisdiction over such securities are completed. Proceeds from the sale of the Debentures will be used to provide:—

1. Approximately \$150,000 for the expansion of the Prescott plant, doubling the capacity of ferrite powder to four tons per day, increasing the iron oxide capacity to 25 tons per day, in order to supply raw material for Ferrox Iron (New York) Ltd., and to modernize and increase efficiency of the present facilities.
2. Working capital for Ferrox Iron (New York) Ltd., in order to meet the requirements for loans totalling \$810,000 authorized by various Government agencies in the United States.
3. Additional working capital to continue the research program for improving and developing new ferrite products. Approximately 50% of the cost is obtained from Government grants totalling \$581,100, which run until May, 1969. To date \$383,519 has been received from such grants, of which \$250,224 has been expended on research and development, and \$133,295 on machinery and equipment.

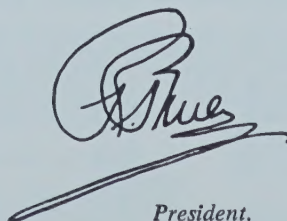
### **ANNUAL MEETING**

Your Directors submit for your consideration the Consolidated Balance Sheet as at December 31, 1966, and the related Financial Statements, which now include your subsidiaries, Ferrox Iron Ltd. and Ferro-Magnetics Ltd. and next year will also include Ferrox Iron (New York) Ltd. The Statement of Source and Application of Funds shows working capital of \$93,920, an increase of \$46,353 during the year.

Annual Meeting of Shareholders will be held at the Windsor Hotel, Montreal, Quebec, on the 18th day of May, 1967. Notice of the Meeting and Proxy form in case you cannot attend in person are included with the report.

Your Directors wish to express their appreciation to Mr. W. J. D. Stone, Managing Director of Ferrox Iron Ltd., Ferro-Magnetics Ltd. and Ferrox Iron (New York) Ltd., and to Dr. J. H. Morgan, your Vice-President and General Manager, for their untiring efforts in carrying through your projects, also to Mr. P. D. R. Maltby, who has now become General Manager of Planning; Mr. John D. Nye, Manager of the Ferrox plant at Prescott, ably assisted by R. E. D. Stanley, and F. E. Noccey; to D. S. Hay, Project Manager of Fina Metal Ltd., to A. L. Chill Sales Manager and to the entire staff for their loyal services throughout the year.

Respectfully submitted on behalf of the Board of Directors,



*President.*

*Montreal, Quebec.  
April 14th, 1967.*



# CONS. QUEBEC SMELTING & REFINING LTD.

(NO PERSONAL LIABILITY)  
AND SUBSIDIARY COMPANIES

## CONSOLIDATED BALANCE SHEET — DECEMBER 31, 1966

Statement I

ASSETS		
<b>CURRENT ASSETS:</b>		
Cash on hand and in bank .....	\$ 34,223.56	
Accounts receivable .....	71,695.07	
Investments in shares of listed mining companies (Note 2 and Schedule A—quoted market value—\$21,168.00) .....	31,626.73	
Inventory—raw material, at cost .....	7,352.87	\$ 144,898.23
<b>INVESTMENTS IN SHARES OF UNLISTED MINING COMPANIES</b> (Note 2 and Schedule B) .....		
		44,440.00
<b>INVESTMENT IN AND ADVANCES TO FERROX IRON (NEW YORK) LTD.</b> A SUBSIDIARY COMPANY (Note 1) .....		
	24,722.29	
<b>INVESTMENT IN AND ADVANCES TO FINA METAL LTD.</b> AN ASSOCIATED COMPANY (Note 3) .....		
	59,256.11	
ADVANCES TO RELATED COMPANIES .....	15,300.00	99,278.40
MORTGAGE RECEIVABLE, less instalments due within one year .....		22,014.46
<b>MINING CLAIMS UNDER DEVELOPMENT LICENCES OR</b> <b>MINING LICENCES (Notes 2 and 4 and Schedule C)</b> .....		
	36,024.04	
<b>OPTION ON MINING RIGHTS,</b> at cost, Portland West Township phosphate properties (Notes 4 and 5) .....		
	46,591.87	82,615.91
<b>FIXED ASSETS, at cost:</b>		
Land .....	3,308.30	
Building .....	56,462.24	
Machinery and equipment .....	212,160.67	
Furniture and fixtures .....	499.71	
	272,430.92	
Less: Received by grant on building, machinery and equipment (Note 7) .....	133,295.59	
	139,135.33	
Less: Accumulated depreciation (Note 8) .....	10,450.48	128,684.85
INVESTMENT IN JONES WET MAGNETIC SEPARATOR .....		6,222.07
<b>DEFERRED EXPENDITURES:</b>		
Development (Statement II) .....	753,451.00	
Administrative (Statement IV) .....	192,061.80	
	945,512.80	
Less: Received by grant (Note 7) .....	250,224.24	695,288.56
ORGANIZATION EXPENSES .....		8,542.97
		<u>\$1,231,985.45</u>
LIABILITIES AND CAPITAL		
<b>CURRENT LIABILITIES:</b>		
Accounts payable and accrued liabilities .....	\$ 63,078.15	
Income taxes payable .....	3,200.00	\$ 66,278.15
7% Mortgage payable, less \$4,500 payable within one year .....		32,625.00
7% Convertible redeemable debentures due February 1, 1972 (Note 6):		
Authorized .....	\$ 500,000.00	
Issued .....		150,000.00
<b>CAPITAL:</b>		
Capital stock (Note 9)—		
Authorized—		
2,500,000 shares of \$5 par value .....	\$12,500,000.00	
Issued and fully paid—		
	<u>Shares</u>	<u>(Discount)</u>
For cash .....	890,200	(\$3,128,742.55)
For net assets of predecessor corporation .....	300,000	(750,000.00)
	<u>1,190,200</u>	<u>(\$3,878,742.55)</u>
		<u>2,072,257.45</u>
Deduct: Cost of mining claims and options abandoned, write-offs and net losses (profits) on disposal of investments and other assets (Statement V) .....		\$1,099,759.42
Less: Surplus of Ferro-Magnetics Ltd. (No Personal Liability), a subsidiary company (Statement VI) .....	10,584.27	1,089,175.15
		983,082.30
<b>SIGNED ON BEHALF OF THE BOARD:</b> R. P. MILLS, Director J. O. SABOURIN, Director		
		<u>\$1,231,985.45</u>

## AUDITORS' REPORT

To the Shareholders of  
CONS. QUEBEC SMELTING & REFINING LTD.  
(No Personal Liability):

We have examined the consolidated balance sheet of Cons. Quebec Smelting & Refining Ltd. (No Personal Liability) and its consolidated subsidiary companies as at December 31, 1966, and the related statements (Statements II to VI inclusive) for the year then ended, and have obtained all the information and explanations we have required. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion and according to the best of our information and the explanations given to us and as shown by the books of the companies, these financial statements are properly drawn up so as to exhibit a true and correct view of the combined state of affairs of the companies as at December 31, 1966 and of their operations for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year except that this year the accounts of Cons. Quebec Smelting & Refining Ltd. (No Personal Liability) and certain of its subsidiary companies have been consolidated for the first time.

PRICE WATERHOUSE & CO.  
Chartered Accountants.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS DECEMBER 31, 1966

Note 1:

- The consolidated financial statements include the accounts as at December 31, 1966 of the following subsidiary companies:  
Ferrox Iron Ltd. (No Personal Liability)—incorporated under the Quebec Mining Companies Act on January 29, 1964.  
Ferro-Magnetics Ltd. (No Personal Liability)—incorporated under the Quebec Mining Companies Act on December 22, 1964.
- The accounts as at December 31, 1966 of Ferrox Iron (New York) Ltd., a wholly owned subsidiary incorporated under the laws of the State of New York on October 15, 1965, are not consolidated because the company has not commenced operations and no audited accounts are available at December 31, 1966. Investments in and advances to Ferrox Iron (New York) Ltd. as at December 31, 1966 comprise:

Capital stock—500 shares at cost	\$ 540.50
Advances	24,181.79
	<u>\$24,722.29</u>

The company is negotiating with U.S. interests to provide loans to Ferrox Iron (New York) Ltd. aggregating approximately \$810,000 at annual rates of interest varying from 2¾% to 6%.



# CONS. QUEBEC SMELTING & REFINING LTD.

(NO PERSONAL LIABILITY)  
AND SUBSIDIARY COMPANIES

## Notes to Consolidated Financial Statements December 31, 1966 (Continued)

Note 2: The investments in shares of mining companies and mining rights are valued at cost, except in the case of unlisted mining shares and shares and mining rights acquired from Quebec Smelting and Refining Corporation in 1948 and where shares were received in consideration of sales of mining rights, which are at valuations determined by Directors of the company.

Note 3: The investment in and advances to Fina Metal Ltd., an associated company, comprise:

Capital stock (49% interest)—20% paid-up	\$28,272.66
Advances	30,983.45
	<u>\$59,256.11</u>

Fina Metal Ltd. was incorporated under the laws of Canada on October 17, 1966 to undertake the construction and operation of a plant for the manufacture of iron powder.

Note 4: The amount at which the mining claims and rights are recorded does not, and does not purport to, represent their present or future value.

Note 5: The mining rights under option may be acquired by the issue to the vendors of 75,000 shares of a company having an authorized capital of 3,000,000 shares, if such is formed to acquire and develop them.

Note 6: Pursuant to a resolution of the Board of Directors on March 3, 1967 the provision made on February 10, 1966 for the issue of \$500,000 7% Convertible Redeemable debentures was increased to an aggregate principal amount of \$1,000,000.

The debentures are redeemable at any time after February 1, 1968, and mature on February 1, 1972. They constitute a first floating charge to and in favour of the Trustee on the undertaking of the company, its property and assets. The debentures are convertible at the option of the holder into fully paid and non-assessable common shares of the company at the following rates for each \$100 principal amount:

1. On or before February 1, 1969	—	100	Common shares
2. February 2, 1969 to February 1, 1970	—	66-2/3	Common shares
3. February 2, 1970 to February 1, 1971	—	50	Common shares
4. February 2, 1971 to January 31, 1972	—	40	Common shares

During the year 1966 \$150,000 of debentures were issued for \$150,000 cash. The company proposes to offer for sale a further \$550,000 of debentures subject to qualification of the company under the applicable statutes.

Note 7: The company has been awarded Government of Canada research and production grants of \$581,100.00 for the period ending May 1969. Funds provided to December 31, 1966 total \$383,519.83 whereof \$133,295.59 is for building, machinery and equipment and \$250,224.24 for development and administrative expenditures.

Note 8: No depreciation has been recorded on the fixed assets of Ferroxx Iron Ltd. (No Personal Liability), a wholly-owned subsidiary, because the company did not commence commercial operations until January 1967.

Note 9: By resolution of the Board of Directors dated May 5, 1966, options were granted to officers and senior personnel of the company to purchase 100,000 un-issued shares of capital stock at \$1 per share. Subject to qualification of the company under the applicable statutes, the options are exercisable at any time until December 31, 1971, on the condition that not more than 20% will be taken up in any one year.

### DEVELOPMENT EXPENDITURES FROM DATE OF INCORPORATION (NOVEMBER 26, 1947) TO DECEMBER 31, 1966

BY AREAS	Balance at December 31, 1965	Expenditures for the year ended December 31, 1966	Costs applicable to mining claims abandoned	Statement II Balance at December 31, 1966
<b>CURRENT GROUPS:</b>				
McKenzie and Roy Townships .....	\$ 90,249.50	6,773.59	—	97,023.09
New Brunswick .....	179,312.19	2,997.41	—	182,309.60
New Quebec—Township 1931 .....	1,266.75	1,768.90	3,035.65	—
Participation in prospecting ventures .....	4,268.90	(1,768.90)	—	2,500.00
Phosphate properties Portland West Township .....	121,542.27	147.18	—	121,689.45
Urban Township .....	4,591.75	—	4,591.75	—
Miscellaneous—prospecting .....	3,955.09	42.48	—	3,997.57
	405,186.45	9,960.66	(7,627.40)	407,519.71
Depreciation of building and equipment—unallocated .....	4,329.00	113.16	—	4,442.16
	409,515.45	10,073.82	(7,627.40)	411,961.87
<b>Pre-production and research expenditures—</b>				
Ferroxx Iron Ltd. (No Personal Liability),				
a subsidiary company (Statement III) .....	247,605.23	93,883.90	—	341,489.13
Per balance sheet—Statement I .....	<u>\$657,120.68</u>	<u>103,957.72</u>	<u>(7,627.40)</u>	<u>753,451.00</u>

### BY DEVELOPMENT EXPENDITURE ACCOUNTS

	Balance at December 31, 1965	Expenditures for the year ended December 31, 1966	Balance at December 31, 1966
Assays .....	\$ 9,549.09	—	9,549.09
Commissary .....	34,377.99	129.17	34,507.16
Depreciation of building and equipment .....	42,979.75	113.16	43,092.91
Diamond drilling .....	296,360.64	—	296,360.64
Engineering .....	14,912.93	4,200.00	19,112.93
Equipment and maintenance .....	11,193.97	—	11,193.97
Geological and engineering salaries .....	5,639.73	—	5,639.73
Geophysical and land surveys .....	54,805.37	432.00	55,237.37
Insurance .....	9,154.35	421.06	9,575.41
Miscellaneous .....	11,198.17	403.00	11,601.17
Participation in prospecting ventures .....	4,268.90	—	4,268.90
Prospecting .....	10,011.35	—	10,011.35
Salaries and wages .....	166,365.69	450.00	166,815.69
Supplies .....	28,813.26	178.43	28,991.69
Taxes, fees and licences .....	48,677.99	2,187.06	50,865.05
Transportation .....	36,018.05	1,250.66	37,268.71
Unemployment insurance .....	1,710.36	4.08	1,714.44
Workmen's compensation insurance .....	11,613.21	305.20	11,918.41
	797,650.80	10,073.82	807,724.62
Development expenditures on mining claims and options abandoned .....	(388,135.35)	(7,627.40)	(395,762.75)
	409,515.45	2,446.42	411,961.87
<b>Pre-production and research expenditures—Ferroxx Iron Ltd. (No Personal Liability)</b>			
(Statement III) .....	247,605.23	93,883.90	341,489.13
Per balance sheet—Statement I .....	<u>\$657,120.68</u>	<u>96,330.32</u>	<u>753,451.00</u>



# CONS. QUEBEC SMELTING & REFINING LTD.

(NO PERSONAL LIABILITY)  
AND SUBSIDIARY COMPANIES

## PRE-PRODUCTION AND RESEARCH EXPENDITURES OF FERROX IRON LTD.

(NO PERSONAL LIABILITY)  
A SUBSIDIARY COMPANY

FROM DATE OF INCORPORATION (JANUARY 29, 1964) TO DECEMBER 31, 1966

Statement III

	Balance at December 31, 1965	Expenditures for the year ended December 31, 1966	Balance at December 31, 1966
Pre-production:			
Incurred by prior interests .....	\$ 47,318.91	—	47,318.91
Miscellaneous .....	5,134.44	1,085.98	6,220.42
Rent .....	1,494.00	1,140.00	2,634.00
Rental of equipment .....	574.71	542.49	1,117.20
Salaries .....	31,825.84	23,360.22	55,186.06
Supplies .....	3,095.76	3,552.75	6,648.51
Technical publications .....	1,724.82	473.23	2,198.05
Testing and consulting fees .....	2,934.62	71.50	3,006.12
Transportation .....	215.28	29.05	244.33
Travelling .....	14,367.80	1,756.33	16,124.13
	<u>108,686.18</u>	<u>32,011.55</u>	<u>140,697.73</u>
Research:			
Insurance .....	2,023.56	542.91	2,566.47
Light, heat and power .....	6,388.78	9,216.61	15,605.39
Materials and supplies .....	41,723.66	35,370.43	77,094.09
Miscellaneous .....	1,794.59	2,840.21	4,634.80
Rental of equipment .....	1,180.62	2,810.56	3,991.18
Salaries and wages .....	99,428.92	113,652.19	213,081.11
Taxes, fees and licences .....	3,493.94	3,529.48	7,023.42
Testing and consultation .....	—	3,732.23	3,732.23
Travelling .....	3,796.57	3,628.72	7,425.29
Transportation .....	3,425.19	7,386.53	10,811.72
Workmen's compensation insurance .....	1,956.31	2,273.25	4,229.56
	<u>165,212.14</u>	<u>184,983.12</u>	<u>350,195.26</u>
	<u>273,898.32</u>	<u>216,994.67</u>	<u>490,892.99</u>
Less:			
Excess of net assets of the subsidiary over cost of acquisition .....	—	10,010.00	10,010.00
Revenue from sales of super concentrates and ferrites .....	26,293.09	14,845.02	41,138.11
Expenditure applied to and recovered or recoverable from Joint Venture—Iron Powder Project .....	—	88,255.75	88,255.75
Estimated expenditures incurred on behalf of and recoverable from related company .....	—	10,000.00	10,000.00
	<u>26,293.09</u>	<u>123,110.77</u>	<u>149,403.86</u>
Per Statement II .....	<u>\$247,605.23</u>	<u>93,883.90</u>	<u>341,489.13</u>

## ADMINISTRATIVE EXPENDITURES FROM DATES OF INCORPORATION TO DECEMBER 31, 1966

Statement IV

	Balance at December 31, 1965	Expenditures for the year ended December 31, 1966	Balance at December 31, 1966
Advertising .....	\$ 4,236.69	452.38	4,689.07
Consulting fees .....	227.00	—	227.00
Cost of share certificates .....	3,852.95	—	3,852.95
Depreciation of office furniture .....	7,488.16	—	7,488.16
Hospital and pension plans .....	975.17	4,101.64	5,076.81
Interest .....	3,282.06	9,515.05	12,797.11
Legal and audit fees .....	17,483.98	8,264.63	25,748.61
Listing and stock exchange fees .....	3,688.35	393.27	4,081.62
Management services—geological, engineering and administrative .....	84,000.00	15,100.00	99,100.00
Miscellaneous and office expenses .....	12,975.34	1,914.07	14,889.41
Office rent .....	9,906.21	—	9,906.21
Office salaries .....	51,919.19	—	51,919.19
Printing and maps .....	11,034.76	34.74	11,069.50
Publicity and shareholders' information .....	10,848.13	6,069.60	16,917.73
Securities registration fees and expenses .....	3,275.34	360.00	3,635.34
Stationery, postage and office supplies .....	7,094.00	1,977.94	9,071.94
Taxes, fees and licences .....	4,168.81	572.43	4,741.24
Telephone and telegrams .....	6,259.73	315.26	6,574.99
Transfer agent's fees .....	31,235.22	2,542.70	33,777.92
Travelling .....	4,317.38	441.47	4,758.85
Workmen's compensation insurance .....	1,773.97	—	1,773.97
Interest and dividends received .....	(6,057.90)	(1,884.06)	(7,941.96)
	<u>273,984.54</u>	<u>50,171.12</u>	<u>324,155.66</u>
Less:			
Cost applicable to mining claims abandoned .....	90,053.26	3,471.85	93,525.11
Excess of revenue over expenditure from Jones Wet Magnetic Separator operations .....	21,995.40	16,573.35	38,568.75
	<u>112,048.66</u>	<u>20,045.20</u>	<u>132,093.86</u>
Per balance sheet—Statement I .....	<u>\$161,935.88</u>	<u>30,125.92</u>	<u>192,061.80</u>

## STATEMENT OF COST OF MINING CLAIMS AND OPTIONS ABANDONED, WRITE-OFFS AND NET LOSSES (PROFITS) ON DISPOSALS OF INVESTMENTS AND OTHER ASSETS DECEMBER 31, 1966

Statement V

	From incorporation to December 31, 1965	For the year ended December 31, 1966	From incorporation to December 31, 1965
Net loss (profit) on disposal of investments in shares of mining companies .....	\$ 279,072.50	(19,364.81)	259,707.69
Write-down of investments .....	22,933.08	67,578.46	90,511.54
Profit on disposals of fixed assets .....	(16,031.04)	—	(16,031.04)
Cost of mining claims and options abandoned—			
Mining claims .....	253,888.08	22,395.29	276,283.37
Development expenditures .....	388,135.35	7,627.40	395,762.75
Administrative expenditures .....	90,053.26	3,471.85	93,525.11
Per balance sheet—Statement I .....	<u>\$1,018,051.23</u>	<u>81,708.19</u>	<u>1,099,759.42</u>



# CONS. QUEBEC SMELTING & REFINING LTD.

(NO PERSONAL LIABILITY)  
AND SUBSIDIARY COMPANIES

## STATEMENT OF INCOME AND EARNED SURPLUS OF FERRO-MAGNETICS LTD.

(NO PERSONAL LIABILITY)  
A SUBSIDIARY COMPANY

FOR THE YEAR ENDED DECEMBER 31, 1966

Statement VI

Sales .....		\$ 6,967.39
Cost of sales .....		4,496.80
Net revenue from custom and analysis work.....		2,470.59
		35,232.12
		37,702.71
Expenses:		
Accounting fees .....	\$6,000.00	
Advertising .....	58.48	
Brochure and printing .....	425.16	
Commission .....	7,415.60	
Insurance .....	108.95	
Legal and audit fees .....	273.38	
Miscellaneous office expenses .....	21.98	
Office salaries .....	6,600.00	
Taxes, fees and licences .....	46.24	
Travelling expenses .....	247.22	
		21,197.01
Estimated income taxes .....		16,505.70
Net income for the year .....		3,200.00
Deficit, December 31, 1965 .....		13,305.70
Earned surplus, December 31, 1966—Statement I .....		2,721.43
		\$10,584.27

### CONSOLIDATED STATEMENT OF SOURCE AND APPLICATION OF FUNDS FOR THE YEAR ENDED DECEMBER 31, 1966

Source:			
Issue of 7% convertible redeemable debentures .....	\$150,000.00		
Government of Canada research and production grants .....	159,272.79		
Net income from Ferro Magnetics Ltd. (N.P.L.) .....	13,305.70		
Net revenue from Jones Wei Magnetic Separator operations .....	16,573.35		
Net revenue from sale of super concentrates and ferrites .....	14,845.02		
Profit on sale of securities .....	19,364.81		
Recovered from Iron Powder Project joint venture .....	88,255.75		
Depreciation .....	797.16		\$462,414.58
Application:			
Fixed asset additions .....	58,338.24		
Deferred expenditures—			
Development and preproduction .....	\$217,068.49		
Administrative .....	50,171.12	267,239.61	
Investment in capital stock and advances to Fina Metal Ltd., an associated company .....	59,256.11		
Investment in capital stock and advances to Ferrox Iron (New York) Ltd., a subsidiary company .....	24,722.29		
Purchase of capital stock in subsidiary companies .....	2,510.00		
Repayment of mortgage capital .....	3,994.97		416,061.22
Increase in working capital .....			\$ 46,353.36
Working capital at December 31, 1965 .....			\$ 47,566.72
Working capital at December 31, 1966 .....			93,920.08 (1)
Increase in working capital (as above) .....			\$ 46,353.36

(1) Includes advances to related companies \$15,300

### INVESTMENTS IN SHARES OF LISTED MINING COMPANIES

Schedule A

Number of shares		Book value	Market value
40,000	Baker Talc .....	\$15,216.64	\$ 4,000.00
13,000	Chib-Kayrand Copper Mines .....	2,334.90	1,690.00
21,800	Merrill Island Mining .....	14,075.19	15,478.00
	Per balance sheet—Statement I .....	\$31,626.73	\$21,168.00

### INVESTMENTS IN SHARES OF UNLISTED MINING COMPANIES

Schedule B

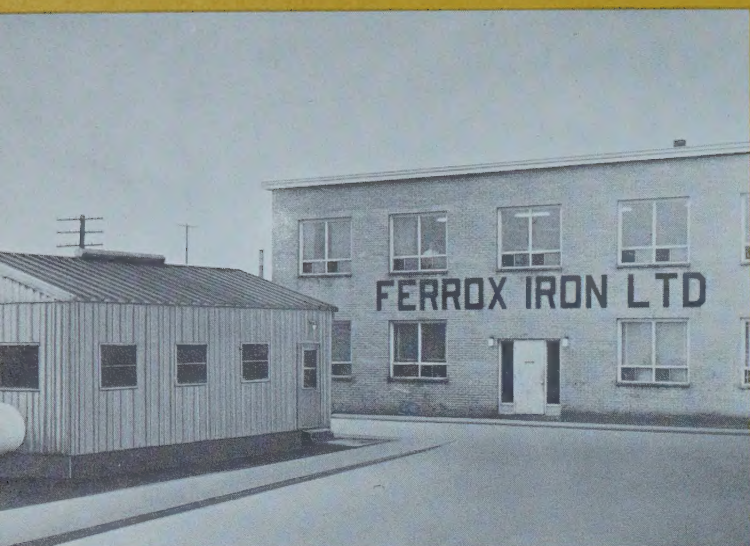
		Book value	Market value
270,000	Chiboug Copper Corporation (pooled) .....		\$10,800.00
129,200	Cuvier Mines .....		2,500.00
562	Gibson Mines .....		1,250.00
24,188	Gibson Mines (pooled) .....		17,850.00
75,000	Grand Manitou Mines (pooled) .....		5,000.00
357,029	Lucky Lake Mines .....		2,000.00
256,669	Lucky Lake Mines (pooled) .....		5,000.00
200,000	Packard Pershing Mines (pooled) .....		40.00
100,000	Ran-Lux Mines (pooled) .....		
4,000	Scott Chibougamau Mines .....		
	Per balance sheet—Statement I .....		\$44,440.00

### MINING CLAIMS UNDER DEVELOPMENT LICENCES OR MINING LICENCES DECEMBER 31, 1966

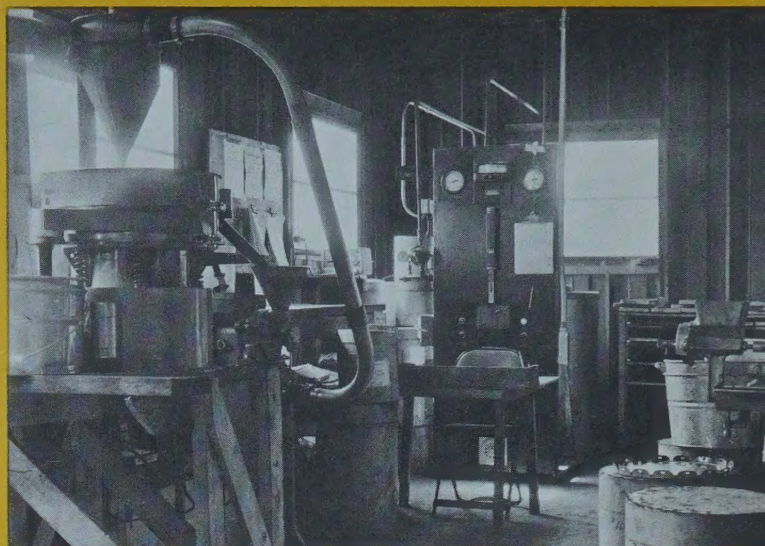
Schedule C

Area	Number of mining claims	Cost
Chibougamau, P.Q. ....	50	\$34,970.00
Gloucester County, N.B.—Mining licence No. 923 (1,224 acres) .....		1,054.04
Per balance sheet—Statement I .....		36,024.04





Prescott Ferrite Plant



Iron Powder Sample Plant

The rapidly growing electronics industry demands greater and greater quantities of ferrite. Automation of the automotive and appliance industries has increased the markets for iron powder and ferrites well beyond supplies. Cons. Quebec Smelting & Refining Ltd. and its subsidiaries are gearing up as rapidly as possible to produce ferrites and iron powder to meet the ever increasing demands of these industries. The Jones Separator development is ready for immediate expansion to supply the requirements of the mineral processing industries.

#### FERROX IRON LTD.

Sales of all ferrites produced in the U. S. last year are estimated at \$65,000,000 in 1966 and the market is expanding at a rate greater than 20 percent per year. Colour television sets contain about \$3.20 worth of ferrites per set and it is expected that eight million sets will be built in 1968. Hard ferrite permanent magnet motors are replacing copper-wound DC motors in automobiles to operate windshield wipers, heater fans, power windows, seat adjusters, air conditioners, aeri-als and convertible tops. Ferrites are used in computers, loud speakers, television, radio, fluorescent lighting, telephones, radio interference filters, high frequency welding, submarine communications and

electronic ignition systems. Holding devices in machine shops and factories, and magnetic drum separators, employ ferrites. Ferrite motors are used in some electric shavers, cordless tools, electric knives and tooth brushes.

Ferrox Iron Ltd. has improved its process for producing hard ferrite, used in many of the above applications, and is producing at a rate of two tons per day. Construction is underway to double the plant at Prescott to four tons per day, and plans are being drawn to build a new 20 ton per day facility.

Two other types of ferrite, one used in television and other electronic applications and an embedding ferrite that, incorporated in rubber or plastic, acts as sealing devices on refrigerator doors, etc., have been developed and plans are underway to build production size plants.

Worldwide interest has developed in ferrites produced by Ferrox Iron and shipments are being made as far afield as Australia.

#### FERROX IRON (NEW YORK) LTD.

This company, a wholly-owned subsidiary of Cons. Quebec Smelting & Refining Ltd., has been



incorporated for the purpose of establishing a ferrite plant at Ogdensburg, New York. Government loans have been made available by the Economic Development Administration of the U. S. Department of Commerce, the New York Job Development Authority, the Local Development Authority and the Ogdensburg Trust Company, to a total of \$810,000 that can be used for the construction and installation of a ferrite plant in Ogdensburg. Ogdensburg is in New York State across the St. Lawrence River from Prescott. Cons. Quebec Smelting & Refining will supply working capital.

#### **FERRO-MAGNETICS LTD.**

This company, wholly-owned by Cons. Quebec Smelting & Refining Ltd., is charged with the test work and development of the Jones Wet Magnetic Separator. Many test programs have been carried out in the past year and it is confidently expected that many of them will lead to production plants. A rotary machine, three times the capacity of the present one, has been built for Ferrox Iron Ltd. by Stearns-Roger Corporation in Denver. This will soon be installed in Prescott. The large capacity machine at the Climax mine has shown excellent performance.

#### **FINA METAL LTD.**

Fina Metal Ltd. was incorporated to produce iron powder for use in powder metallurgy. This is a process by which powdered metal, or mixtures of powdered metals, are compressed into intricate shapes, then sintered to harden the material. Parts can be produced by the thousands by this process with very close tolerances and uniform metal-

lurgical characteristics. The automotive industry, in particular, is using more and more powdered iron for this purpose. Consumption in the U. S. A. in 1966 was about 100,000 tons. Forecasts indicate that 250,000 tons per year will be required by 1970. Fina Metal Ltd. has worked out details of the process and production at a rate of 50 tons per day is planned to help supply this rapidly expanding market.

Fina Metal Ltd. is owned 51% by Canadian Petrofina Limited and 49% by Cons. Quebec Smelting & Refining Ltd. It is expected that the production plant will be built in the refinery area of Montreal East, with Canadian Petrofina supplying hydrogen gas to reduce the iron oxide to iron powder.

A sample plant has been in operation at Prescott for several months producing iron powder for submission to potential customers for testing and comment. To date the results indicate that our iron powder is as good as or better than the best powders presently in use.

Large samples have been shipped for customer evaluation and arrangements have been made for three production runs of pressed powder parts. One such run has already been very successfully completed, showing our powder to have very superior handling qualities and characteristics.

Discussions are being held with an American steel company about the use of iron powder in the production of continuous forms of steel such as sheet and strip. The powder could be mixed with alloying elements, then rolled and heat-treated to produce steel, thereby eliminating the blast furnace. Cost is the main consideration.

We therefore can look forward to a year of expansion and growth.

**Parts made from Fina Metal Powder**



**Magnets made from Ferrox Ferrite Powder**





# CONS. QUEBEC SMELTING & REFINING LTD.

(NO PERSONAL LIABILITY)

## OFFICERS :

PRESIDENT :  
VICE-PRES. & GEN. MGR.  
SECRETARY-TREASURER :  
DEVELOPMENT MANAGER :

R.P. Mills  
J.H. Morgan, Ph.D.  
J.O. Sabourin, F.C.I.S.  
W.J.D. Stone, P. Eng.

## DIRECTORS :

John McG. Home, Q.C. - Montreal, Que.  
R.P. Mills - Montreal, Que.  
J.H. Morgan, Ph.D. - Montreal, Que.  
J.O. Sabourin, F.C.I.S. - Pointe Claire, Que.  
J. Douglas Streit - Toronto, Ont.

## SUBSIDIARIES

### FERROX IRON LTD.

(NO PERSONAL LIABILITY)

## OFFICERS :

PRESIDENT :  
VICE-PRESIDENT :  
MANAGING DIRECTOR :  
SECRETARY-TREASURER :

R.P. Mills  
J.H. Morgan, Ph.D.  
W.J.D. Stone, P. Eng.  
J.O. Sabourin, F.C.I.S.

## DIRECTORS :

R.P. Mills - Montreal, Que.  
J.H. Morgan, Ph.D. - Montreal, Que.  
W.J.D. Stone, P. Eng. - Ottawa, Ont.  
J.O. Sabourin, F.C.I.S. - Pointe Claire, Que.  
John McG. Home, Q.C. - Montreal, Que.

### FERROX IRON (NEW YORK) LTD.

## OFFICERS :

PRESIDENT :  
VICE-PRESIDENT :  
VICE-PRESIDENT :  
SECRETARY-TREASURER :

R.P. Mills  
J.H. Morgan, Ph.D.  
W.J.D. Stone, P. Eng.  
J.O. Sabourin, F.C.I.S.

## DIRECTORS :

R.P. Mills - Montreal, Que.  
J.H. Morgan, Ph.D. - Montreal, Que.  
J.O. Sabourin, F.C.I.S. - Pointe Claire, Que.  
W.J.D. Stone, P. Eng. - Ottawa, Ont.  
John Winthrop - Ogdensburg, N.Y., U.S.A.

### FERRO - MAGNETICS LTD.

(NO PERSONAL LIABILITY)

## OFFICERS :

PRESIDENT :  
VICE-PRESIDENT :  
MANAGING DIRECTOR :  
SECRETARY-TREASURER :

R.P. Mills  
J.H. Morgan, Ph.D.  
W.J.D. Stone, P. Eng.  
J.O. Sabourin, F.C.I.S.

## DIRECTORS :

R.P. Mills - Montreal, Que.  
J.H. Morgan, Ph.D. - Montreal, Que.  
W.J.D. Stone, P. Eng. - Ottawa, Ont.  
J.O. Sabourin, F.C.I.S. - Pointe Claire, Que.  
John McG. Home, Q.C. - Montreal, Que.

### FINA METAL LTD. LTÉE

## OFFICERS :

PRESIDENT :  
VICE-PRESIDENT :  
GENERAL MANAGER :  
PROJECT MANAGER :  
TREASURER :  
SECRETARY :  
ASSISTANT SECRETARY-TREASURER :  
ASSISTANT SECRETARY :

Dr. John Rhodes Patton  
R.P. Mills  
W.J.D. Stone, P. Eng.  
D.S. Hay  
H. J. Hughes  
A.W. McLeod  
J.O. Sabourin, F.C.I.S.  
N.G.D. Gray

## DIRECTORS :

H.J. Hughes - Montreal, Que.  
R.P. Mills - Montreal, Que.  
J.H. Morgan, Ph.D. - Montreal, Que.  
K.S.C. Mulhall - Montreal, Que.  
Dr. John Rhodes Patton - Montreal, Que.  
W.J.D. Stone, P. Eng. - Ottawa, Ont.  
W. Whigham - Montreal, Que.